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09/863,233	05/21/2001	Joseph Depaolantonio	CSCO-103808	9945

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EXAMINER

LEUNG, CHRISTINA Y

ART UNIT	PAPER NUMBER
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2633

DATE MAILED: 07/27/2004

#4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/863,233

Applicant(s)

DEPAOLANTONIO, JOSEPH

lb

Examiner

Christina Y. Leung

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☒ Claim(s) 7, 8, 10 and 11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claims 7, 8, 10, and 11 are objected to because of the following informalities:

Claims 7 and 8 recite "said transmitted query codes" in lines 1-2 in each claim.

Examiner respectfully suggests that Applicants change this term in each claim so that their terminology is consistent with that used in parent claim 1 (which recites transmitted "queries," not "query codes").

Claims 10 and 11 also recite "the first query code" and "the second query code" respectively; the word "code" should be removed from both of these claims for the same reason.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 22 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 22 recites "said automatic analyzing" in line 2 of the claim. There is insufficient antecedent basis for this limitation in the claim because claim 20, on which claim 22 currently depends, does not recite automatic analyzing. Examiner respectfully suggests that Applicants amend the claim to depend on claim 21 instead.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 13-18 and 20-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Tindal (US 2002/0069275 A1).

Regarding claim 13, Tindal discloses a system for auditing an optical network (Figures 2 and 3), comprising:

two or more computer systems (i.e., administrator 110 shown as a computer in Figure 2 and computer storage element 145, for example, or even the various network devices 135, which would be well understood in the art as generally being or including “computer systems” having processing means and/or software; paragraphs [0011] and [0012]);

an optical network coupled to the computer systems, the network communicatively coupled with the computer systems, the optical network comprising an optical medium and optical devices for providing a communication between the computer systems (Figure 8 shows optical devices such as servers for optical communication, for example); and,

a device (network manager unit 140) coupled to the optical network and capable of transmitting queries in the optical network to the optical devices,

wherein first and second queries are transmitted to at least one of the optical devices and wherein the second query is based on the response to the first query.

Tindal for example discloses that a health manager element 180, which is part of the network manager unit 140 (Figure 3; paragraph [0034]), transmits a query by polling an optical device about its status. The network manger unit 140 then receives a response from the optical device and analyzes the response in order to decide what action to take (paragraph [0042]). Tindal further discloses that the network manger unit 140 (which also includes an action manger 185) may subsequently send commands and additional queries in order to resolve the problem that had been detected by a first/earlier query (paragraphs [0042] and [0055]).

Regarding claim 14, Tindal discloses that at least a portion of the optical network is implemented as a DWDM optical network (Figure 8 shows DWDM switches 330, for example).

Regarding claim 15, Tindal discloses that the system further comprises a device coupled to the optical network capable of receiving responses to the transmitted queries (elements in network manger unit 140 receive communications from the optical devices; paragraph [0042]).

Regarding claims 16 and 17, Tindal discloses that at least one of the computer systems (such as remote storage 145) comprises a data storage device, capable of storing instructions for transmitting the queries in the optical network or for receiving responses to the queries in the optical network (paragraphs [0032] and [0033]).

Regarding claim 18, Tindal discloses that at least one of the computer systems is capable of automatically analyzing the responses to the queries. Tindal discloses that

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network manager unit 140, which would be understood in the art including a computer system with processing means and/or software (paragraph [0033]), is capable of automatically analyzing the responses to the queries (paragraph [0042]).

Regarding claim 20, Tindal discloses a device for auditing an optical network (including administrator 110 and network manager unit 140 shown in Figures 2 and 3), comprising:

a transmitting element coupled to the optical network (such as health manager 180, part of network manager unit 140 and shown in Figure 3, which transmits through event bus 175; paragraph [0042]);

a receiving element coupled to the optical network (such as policy manager 170, part of network manager unit 140 and shown in Figure 3, which can receive messages through event bus 175; paragraph [0038]); and

a computing element coupled to the optical network (including various processing/computing elements in network manager unit 140, and also administrator 110, which is shown explicitly as a computer in Figure 2).

Tindal further discloses that the device for auditing an optical network is capable of formulating and transmitting queries to devices 135 in the optical network and receiving responses to the queries; and discloses that first and second queries are transmitted to at least one of the devices and wherein the second query is based on the response to the first query. Tindal for example discloses that a health manager element 180, which is part of the network manager unit 140 (Figure 3; paragraph [0034]), transmits a query by polling a hardware device 135 about its status. The network manager unit 140 then receives a response from the network device 135 and analyzes the response

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in order to decide what action to take (paragraph [0042]). Tindal further discloses that the network manger unit 140 (which also includes an action manger 185) may subsequently send commands and additional queries in order to resolve the problem that had been detected by a first/earlier query (paragraphs [0042] and [0055]).

Regarding claim 21, Tindal discloses that the device is further capable of automatically analyzing the responses to the queries (paragraph [0042]).

Regarding claim 23, Tindal discloses that the device is further capable of making recommendations for appropriate action in the management of the optical network (paragraphs [0036]-[0038]).

Regarding claim 24, Tindal discloses that at least a portion of the optical network is implemented as a DWDM optical network (Figure 8 shows DWDM switches 330, for example).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-12, 19, 22, 25-35, and 36-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tindal in view of Chuter et al. (US 5,367,394A).

Regarding claim 1, Tindal discloses a method for auditing an optical network (Figures 2 and 3), comprising the steps of:

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transmitting a query (from administrator 110 and network manager unit 140) to a hardware device in the optical network (i.e., various devices such as a router 105 or another device 125; they are collectively labeled as network devices 135);

receiving a response to the query;

analyzing the response to the query; and

transmitting a second query to the hardware device, the second query based on the response to the first query, in order to gather status information of the hardware device.

Regarding claim 25, as similarly discussed above with regard to claim 1, Tindal discloses a computer useable medium having computer useable code embodied therein causing a computer (i.e., various processing/computing elements in network manager unit 140, which operates based on software such as code from storage device 145 or an operating system, etc.; Figures 2 and 3; paragraphs [0031]-[0033]) to perform operations comprising:

transmitting a query (from administrator 110 and network manager unit 140) to a hardware device in the optical network (i.e., various devices such as a router 105 or another device 125; they are collectively labeled as network devices 135);

receiving a response to the query;

analyzing the response to the query; and

transmitting a second query to the hardware device, wherein the second query is based on the response to the first query.

Regarding both claims 1 and 25, Tindal for example discloses that a health manager element 180, which is part of the network manager unit 140 (Figure 3; paragraph [0034]), transmits a query by polling a hardware device 135 about its status.

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The network manger unit 140 then receives a response from the network device 135 and analyzes the response in order to decide what action to take (paragraph [0042]). Tindal further discloses that the network manger unit 140 (which also includes an action manger 185) may subsequently send commands and additional queries in order to resolve the problem that had been detected by a first/earlier query (paragraphs [0042] and [0055]).

Tindal also discloses that network devices may initiate a message (by posting a message to event bus 175, part of network manager unit 140) and that such a message may be reported to a user through administrator 110 (paragraph [0036]). Tindal further discloses that such a message may be analyzed (by policy manager 170, part of network manager device 140), and this analysis may be also reported to a user through administrator 110 (paragraphs[0038-0039]).

However, Tindal does not specifically disclose producing a report of a response from a network device and the analysis of that response (that is, when a “response” is specifically a response to a query sent to the network device, as recited in the claim, and not simply a message that the device has initiated).

However, it is well known in the art that a user would desire to obtain as much information as possible about the status of the network devices in a system such as disclosed by Tindal in order to make the best decisions about possible actions. Chuter et al. in particular disclose a method related to the one disclosed by Tindal including transmitting and receiving queries to and from a network device (column 3, lines 8-34). Chuter et al. further teach that the response to the query may be analyzed to fully determine status information about the device and that this response and analysis is reported to the user (column 4, lines 5-15). Again, Tindal also already suggests producing

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responses to queries and corresponding analysis, and Tindal already suggests reporting device-initiated messages.

Regarding both claims 1 and 25, it would have been obvious to a person of ordinary skill in the art to produce a report of the response and analysis as taught by Chuter et al. in the method disclosed by Tindal simply in order to allow a user to be fully aware of the status of the network devices. The method disclosed by Tindal is already directed to providing a user with a way to interface and send commands to network devices. One in the art would have been particularly motivated to include a step of reporting device responses such as taught by Chuter et al., so that this feedback from the devices can further help a user decide how to act accordingly.

Regarding claim 36, as similarly discussed above with regard to claim 1, Tindal discloses a system for auditing an optical network (Figures 2 and 3), comprising:

transmitting means for transmitting a query to a hardware device in the optical network (various parts of network manager unit 140, such as health manager 180 or action manger 185 shown in Figure 3, transmit through event bus 175; paragraph [0042]);

receiving means for receiving a response to the query; and

analyzing means for analyzing the response to the query (various elements in network manager unit 140 also receive and analyze responses to queries).

Tindal further discloses that the transmitting means transmits a second query to the hardware device, the second query being based on the response to the first query, in order to gather status information of the hardware device.

Again, Tindal for example discloses that a health manager element 180, which is part of the network manager unit 140 (Figure 3; paragraph [0034]), transmits a query by

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polling a hardware device 135 about its status. The network manger unit 140 then receives a response from the network device 135 and analyzes the response in order to decide what action to take (paragraph [0042]). Tindal further discloses that the network manger unit 140 (which also includes an action manger 185) may subsequently send commands and additional queries in order to resolve the problem that had been detected by a first/earlier query (paragraphs [0042] and [0055]).

Tindal also discloses that network devices may initiate a message (by posting a message to event bus 175, part of network manager unit 140) and that such a message may be reported to a user through administrator 110 (paragraph [0036]).

However, Tindal does not specifically disclose a report producing means for producing a report of a response from a network device that is, when a “response” is specifically a response to a query sent to the network device, as recited in the claim, and not simply a message that the device has initiated).

However, it is well known in the art that a user would desire to obtain as much information as possible about the status of the network devices in a system such as disclosed by Tindal in order to make the best decisions about possible actions. Chuter et al. in particular disclose a system related to the one disclosed by Tindal including means for transmitting and receiving queries to and from a network device (column 3, lines 8-34). Chuter et al. further teach means for reporting the responses to the queries (column 4, lines 5-15). Again, Tindal also already suggests producing responses to queries and corresponding analysis, and Tindal already suggests reporting device-initiated messages.

Regarding claim 36, it would have been obvious to a person of ordinary skill in the art to including a means for producing a report of the response as taught by Chuter et

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al. in the system disclosed by Tindal simply in order to allow a user to be fully aware of the status of the network devices. The system disclosed by Tindal is already directed to providing a user with a way to interface and send commands to network devices. One in the art would have been particularly motivated to include a means for reporting device responses such as taught by Chuter et al., so that this feedback from the devices can further help a user decide how to act accordingly.

Regarding claims 3, 26, and 37, Tindal already discloses that the system reports recommendations associated with the management of the network after processing messages that may be sent from network devices (paragraphs [0036]-[0038]). It would have been obvious to a person of ordinary skill in the art to include similar recommendations in the report produced in the system described by Tindal in view of Chuter et al. in order to provide further information and guidance to the user.

Regarding claims 4, 27, and 38, Tindal discloses that at least a portion of the network is implemented as a DWDM optical network (Figure 8 shows DWDM switches 330, for example).

Regarding claims 5, 28 and 39, Tindal discloses that the hardware device (i.e., one of devices 135 such as router 105 or optical device 125) is a portion of the network's infrastructure.

Regarding claims 6, 29, and 40, Tindal discloses that the hardware device may be a DWDM device (such as a DWDM switch 330 shown in Figure 8).

Regarding claims 7, 30, and 41, Tindal discloses that the step of transmitting the transmitted queries is accomplished entirely within the optical network.

Regarding claims 8 and 31. The method described in Claim 1, wherein the transmitted queries may be generated by a dedicated network audit device (such as health manager element 180 within network manger unit 140).

Regarding claims 9, 32 and 42, Tindal discloses that the receiving of the received responses is accomplished entirely within the network.

Regarding claims 10, 33, and 43, Tindal discloses that the first query may request information related to the part number and location in the optical network of the hardware device (paragraph [0042]).

Regarding claims 11, 34, and 44, Tindal discloses that the second query may be determined by database reference to the hardware type of the hardware device (paragraph [0054]).

Regarding claims 12 and 35 , Tindal discloses that a further step of analyzing the responses to the queries may be performed by automated intelligent decision-making (using the policy manager 170 and the action manager 185, for example; paragraphs [0038] and [0042]).

Regarding claim 19, Tindal discloses a system as discussed above with regard to claim 13. As similarly discussed above with regard to claim 1, Tindal does not specifically disclose that the system further comprises a device for presenting the responses and the analysis in a user readable format. However, again, Chuter et al. in particular disclose a system related to the one disclosed by Tindal including transmitting and receiving queries to and from a network device (column 3, lines 8-34). Chuter et al. further teach that the response to the query may be analyzed to fully determine status

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information about the device and that this response and analysis is reported to the user (column 4, lines 5-15).

It would have been obvious to a person of ordinary skill in the art to produce a report of the response and analysis as taught by Chuter et al. in the system disclosed by Tindal simply in order to allow a user to be fully aware of the status of the network devices. One in the art would have been particularly motivated to include a device for presenting device responses such as taught by Chuter et al. so that this feedback from the devices can further help a user decide how to act accordingly.

Regarding claim 22, as well as the claim may be understood with regard to 35 U.S.C. 112 discussed above, Tindal discloses a system as discussed above with regard to claims 20 and 21. As similarly discussed above with regard to claim 1, Tindal does not specifically disclose that the device for presents results of automatic analysis in a user readable format. However, again, Chuter et al. in particular disclose a device related to the one disclosed by Tindal including transmitting and receiving queries to and from a network device (column 3, lines 8-34). Chuter et al. further teach that the response to the query may be analyzed to fully determine status information about the device and that this response and analysis is reported to the user (column 4, lines 5-15).

It would have been obvious to a person of ordinary skill in the art to produce a report of the response and analysis as taught by Chuter et al. in the system disclosed by Tindal simply in order to allow a user to be fully aware of the status of the network devices. One in the art would have been particularly motivated to include a device for presenting analysis such as taught by Chuter et al. so that this feedback can further help a user decide how to act accordingly.

Response to Arguments

8. Applicants' arguments filed 05 May 2004 with respect to Tindal have been fully considered but they are not persuasive. Examiner notes that the amendment to claim 1 generally incorporates the limitations previously presented in claim 2 (now canceled) and the amendments to the other independent claims also comprise including limitations similar to those from claim 2. Since the previous Office Action did not rely on Cao or Turban et al. as primary references to reject claim 2, Applicants' arguments with respect to the previously made 35 U.S.C. 102 rejections over Cao and 35 U.S.C. 103 rejections over Turban et al. in view of various other references are moot.

Examiner generally maintains the position taken in the previous Office Action with regard to the disclosure and teachings of Tindal. However, Examiner notes that the current Office Action includes new 35 U.S.C. 102 rejections of some claims over Tindal; those claims had been previously rejected under 35 U.S.C. 103.

Examiner respectfully disagrees with Applicants' assertion on pages 13-14 of their response that Tindal does not disclose certain features of the independent claims. Although Tindal does disclose a global graphical user interface (GUI) for an optical network, Tindal also discloses that the elements that are interfaced by a user through the GUI are elements that interact with hardware devices in the optical network by transmitting/receiving queries.

Examiner further maintains that Tindal discloses transmitting a second query to a hardware device, the second query based on the response to a first query, in order to gather status information of the hardware device. As already described above, Tindal for example discloses that a health manager element 180, which is part of the network

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manager unit 140 (Figure 3; paragraph [0034]), transmits a query by polling a hardware device 135 about its status. The network manger unit 140 then receives a response from the network device 135 and analyzes the response in order to decide what action to take (paragraph [0042]). Tindal further discloses that the network manger unit 140 (which also includes an action manger 185) may subsequently send commands and additional queries in order to resolve the problem that had been detected by a first/earlier query (paragraphs [0042] and [0055]).

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christina Y. Leung whose telephone number is 703-605-1186. The examiner can normally be reached on Monday to Friday, 6:30 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on 703-305-4729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you

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have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free).

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